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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,862	06/25/2003	Masami Shirai	P23522	2111

7055 7590 11/02/2005

GREENBLUM & BERNSTEIN, P.L.C.  
1950 ROLAND CLARKE PLACE  
RESTON, VA 20191

EXAMINER

RATCLIFFE, LUKE D

ART UNIT	PAPER NUMBER
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3662

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/602,862	SHIRAI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Luke D. Ratcliffe	3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-11, 13-17, 19, 22-27, 32-34, 36 and 37 is/are rejected.
- 7) ☒ Claim(s) 5-7, 12, 18, 20, 21, 28-31 and 35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 38-64 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 9/29/05.

Applicant's election with traverse of group I in the reply filed on 9/29/05 is acknowledged. The traversal is on the ground(s) that the search does not pose a burden on the examiner. It is not required of the examiner to show a burden for election of species, furthermore it is not found persuasive because the invention does include distinct species and would entail different searches including multiple different configurations of a multiple number of cameras and a multiple number of projectors with multiple lens configurations, this constitutes a burden on the examiner.

The requirement is still deemed proper and is therefore made FINAL

### ***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

Referring to the order of claims 11-13:

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A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim.

A claim which depends from a dependent claim should not be separated by any claim which does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP § 608.01(n).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 8, 14, 16, 19, 17, 22-24 and 33-36 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Tamashima (3261359).

Referring to claim 1, 32, and 36, Tamashima shows a surveying system comprising a position relation calculating processor (pages 1-4), a correspondence establishing processor (pages 1-4), and an image processor (pages 1-4). It would be inherent that a device supports this surveying system and that there would need to be a computer program that controls the functions of the surveying system.

Referring to claim 2, Tamashima shows a system that is able to obtain said measurement information from said measurement point (pages 1-4).

Referring to claim 3, Tamashima shows a system that relation between three-dimensional measurement information of control points which is obtained by said

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surveying device and two dimensional position information of a point corresponding to said control points on said schematic image, and wherein said control points are designated on said schematic image (pages 1-4).

Referring to claim 4, Tamashima shows a system that includes an image capturing device (figure 1).

Referring to claim 8, Tamashima shows a system that includes correspondence establishing processor as stated in claim 8 (pages 1-4).

Referring to claim 14, Tamashima shows a system further comprising an image indicating device, and said schematic image, on which a position of said staking point is indicated, can be displayed on a screen of said image indicating device (figures 1-3 and page 2).

Referring to claim 16, Tamashima shows a system wherein said image processor superimposes a symbol for indicating a position of a target on said schematic image, and wherein said target is measured so as to carry out staking out surveying for said staking point (page 2).

Referring to claim 17, 19, and 34, Tamashima shows a system wherein said image processor superimposes a distance between said target and said staking point or measurement point on said schematic image (pages 2 and 3).

Referring to claim 22, Tamashima shows a system wherein said positional relation is calculated for a relation between given three-dimensional measurement information of a plurality of control points and two-dimensional position information of said control points on said schematic image (pages 1-4).

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Referring to claim 23 Tamashima shows a system that includes the image processor as discussed in claim 23 (pages 1-4).

Referring to claim 24, it is inherent that if the processor can display information of a staking point and a measuring point on a schematic image then it is able to associate and record said three-dimensional position information of said staking point, said measurement information of said measurement point, and image data of said schematic image.

Referring to claim 33, it would be inherent that there is a data receiving processor in order to pass information such as a staking point or measurement points to the system.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamashima (3261359) in view of Kaneko (6304669).

Referring to claim 9, Kaneko shows a image processor that shows a plan view that indicates at least one of the relations between the position where said schematic image is captured, the position of said staking point, the position of said measurement point, and position of said surveying device (column 1 and 2). It would have been obvious to modify Tamashima to include the image processor taught by Kaneko

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because this allows for a relationship between the position where the schematic image is captured, the staking point, the measurement point, and the position of said surveying device to be viewed by the user, further allowing the user to determine the exact measurement information.

Referring to claim 10, Kaneko further shows an image processor that superimposes secondary surveying information on said schematic image, and said secondary surveying information is derived on the basis of relations between said staking point and said measurement point (column 1 and 2). It would have been obvious to further modify Tamashima to include the image processor taught by Kaneko because this allows for vital information such as relative distance and relative elevation of the measurement point and the staking point to be viewed by the user.

Referring to claim 11, Kaneko further shows an image processor that superimposes secondary surveying information on said schematic image, and said secondary surveying information is derived on the basis of relations between a plurality of measurement points (column 1 and 2). It would have been obvious to further modify Tamashima to include the image processor taught by Kaneko because this allows for vital information such as relative distance and relative elevation of the measurement points to be viewed by the user.

Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamashima (3261359).

Referring to claim 13, Tamashima shows an image indicating device (pages 1-4), an input device (pages 1-4), wherein the positions of said measurement points relating

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to said secondary surveying information are determined (page 2). It would be obvious to include this specific type of position determination with the device taught by Tamashima because the secondary information that would be given to the user would be vital in the surveying of the given area.

Referring to claim 15, the examiner takes official notice that including a printer when using a surveying device does not give the application any patentable weight.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tamashima (3261359) in view of Brookler (2002/0007303).

Tamashima shows a surveying system comprising a position relation calculating processor (pages 1-4), a correspondence establishing processor (pages 1-4), and an image processor (pages 1-4). Brookler shows a personal digital assistant that is used for surveying including an image processor. It would have been obvious to modify Tamashima to include the personal digital assistant taught by Brookler because this is a simple portable way to view the schematic image.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brookler (2002/0007303) in view of Tamashima (3261359).

Brookler shows a personal digital assistant that is used for surveying including an image processor. Tamashima shows a surveying system comprising a position relation calculating processor (pages 1-4), a correspondence establishing processor (pages 1-4), and an image processor (pages 1-4). It would have been obvious to modify Brookler to include the surveying device taught by Tamashima because this is an image based surveying system that can be made portable through the use of a digital camera.



Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isomura (JP 2001/133263) in view of Tamashima (3261359).

Isomura shows an imaging device (figure 1). Tamashima shows a surveying system comprising a position relation calculating processor (pages 1-4), a correspondence establishing processor (pages 1-4), and an image indicating device (pages 1-4). It would have been obvious to modify Isomura to include the surveying device taught by Tamashima because this is an image based surveying system that can be made portable through the use of a digital camera.

***Allowable Subject Matter***

Claims 5-7, 12, 18, 20, 21, 28-31, and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Isomura JP2001/0023766 shows a control system that controls the height level of blades on construction equipment, this is related to claims 18 and 35.

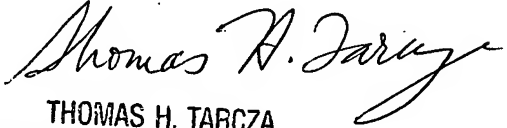
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke D. Ratcliffe whose telephone number is 571-272-3110. The examiner can normally be reached on 8:00-4:30 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LDR

  
THOMAS H. TARCZA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600